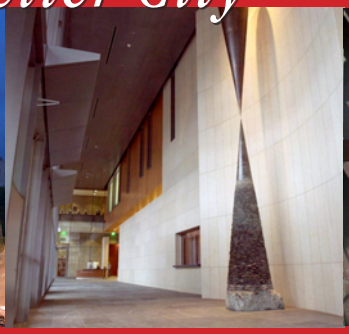
City of Seattle

SUSTAINABLE BUILDING PROGRAM

5-YEAR REPORT
2000-2005

BUILDING *a Better City*




Appendices

A note from the Green Building Team Chair

It's been an honor and a privilege to serve as the chair of the City of Seattle Green Building Team since it was established in 1998.

During this time, I have collaborated with so many others, both inside and outside the ranks of City staff. I want to personally pay tribute to our amazing and talented green building community here in Seattle. From capital projects managers, architects, builders, property managers, conservation program managers, landscape architects, engineers, interior designers, elected officials, developers, and so many more—you have all made it happen, each with your own special contribution.

As we look ahead to the ongoing evolution of our program and further capacity-building for green building in our region, I expect more excitement, more accomplishments, and more reasons for hope. All this won't come without challenges as always, but as I see it, our future looks bright.

Lucia Athens
Green Building Team Chair
City of Seattle Sustainable Building Program
October 2005

Published November 3, 2005

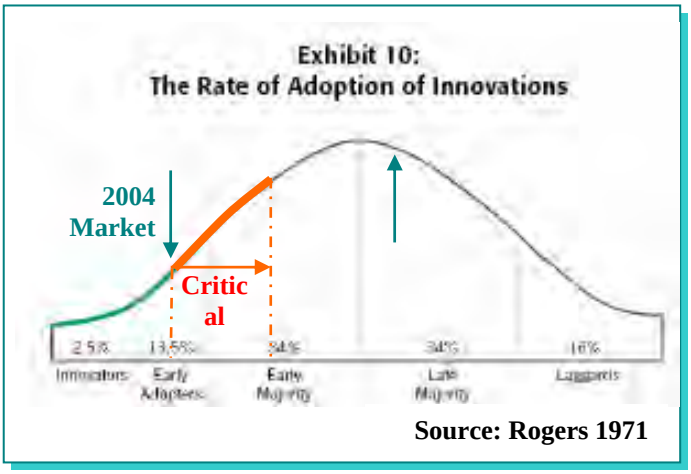
TABLE OF CONENTS

These appendices listed below accompany the City of Seattle Sustainable Building Program 5-Year Report, "Building a Better City," which can be downloaded at www.seattle.gov/dpd/sustainability.

APPENDIX I

Innovation Adoption

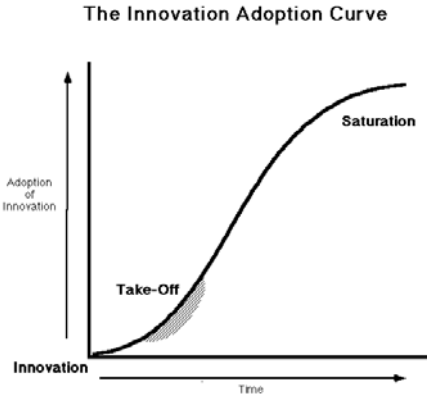
Adoption and diffusion theory[1] explains how new ideas and innovations are adopted in the marketplace. "Adoption" occurs at the individual or organizational level, and "diffusion" occurs at the market level as the innovation spreads to general use. "Integration" of the innovation occurs when the innovation becomes standard practice. Understanding the phase of adoption and diffusion is necessary for developing a successful program to move the market more quickly. Diffusion is the result of 1) an innovation or new idea 2) being communicated through certain channel 3) over time 4) among members of a social system.



Source: Rogers 1971

Innovations occur at the individual or organization level when the new idea is perceived to provide a relative advantage, consistent with existing values, readily understood, can be tried on a limited basis, and the results are visible to others. The City of Seattle served as an innovator for green building. The City established the relative advantage in terms of operational cost savings and enhanced health and productivity; green building reflected its values of environmental stewardship; LEED provided a design guideline that was easy to understand; the City applied LEED to a number of capital projects; and, the results were visible to City staff and industry professionals.

Communication is an essential element of diffusion theory. Knowledge sharing changes attitudes about a new idea, and research has demonstrated that interpersonal communication is more effective than other channels of communication. In other words, individuals evaluate innovations based on the subjective evaluations of their peers who have adopted the innovation. The City's GBT has been very successful at sharing knowledge about green building, and many of the elements of the City's efforts to date have focused on raising awareness, communicating the results and benefits, and coordinating training for industry professionals.



The Innovation Diffusion Game, Alan AtKisson, In Context,

Time also plays a factor in innovation and diffusion. Individuals gain knowledge about an innovation, change their attitude and make a decision to adopt, implement the new idea, and evaluate the results. Five classifications of individuals based on when they adopt a new idea:

- **Innovators** (2.5%) introduce new ideas and may be considered mavericks
- **Early adopters** (13.5%) follow and are considered opinion leaders in their community
- **Early majority** (34%) are socially connected but more deliberate in adopting new ideas
- **Late majority** (34%) follow due to increasing pressure within social networks
- **Laggards** (16%) may be outside social networks and resistant to change

[1] *Rogers, E. M. (a995). Diffusion of innovations (4th edition). New York: The Free Press.*

Innovation and diffusion occurs within a **social system**. **Opinion leaders**, or early adopters, influence individuals within a social system to change attitudes toward a new idea. **Change agents** within the social system attempt to directly influence clients to adopt an innovation, and the City has served as a change agent within the local building industry. An innovation reaches diffusion when **critical mass** is reached and the rate of adoption becomes self-sustaining. **Critical mass occurs when early adopters begin to influence the early majority to adopt the new idea.**

While sustainable building is catching on with early adopters, there is still much work to be done. The table below shows LEED building owners in Seattle and Portland by sector. The level of adoption may vary by sector, or the numbers may represent different slices of the pie according to local construction market activity. According to a recent Economic Development Study conducted for the City, "Seattle's Sustainable Building industry is just now approaching the 'Early Majority' portion of the (innovation adoption) curve, which would suggest that Seattle can expect significant growth in the Sustainable Building industry in the near to mid-term future.[2] By understanding Adoption and Diffusion theory, and assessing the Seattle market, the City's Sustainable Building Program can more effectively identify strategies that will more rapidly transform the marketplace.

Seattle		
Local Government	14	39%
Profit Corporation	14	39%
Nonprofit Corporation	3	8%
State Government	3	8%
Federal Government	2	6%
Grand Total	36	100%

Portland		
Profit Corporation	**29**	**66%**
Nonprofit Corporation	8	18%
Local Government	4	9%
State Government	2	5%
Federal Government	1	2%
Grand Total	44	100%

In Portland, 66% of LEED projects are private sector developments.

[2] *Sustainable Building Cluster Study, Draft report, Berk & Associates. Final report due for release in 2006.*

APPENDIX 2

Lessons Learned from LEED™ Implementation

Many factors related to utility savings, construction costs, etc., will have an associated cost benefit. In addition, some aspects of the design process, such as project management approach, may impact the cost-effectiveness of pursuing sustainable building.

COST AND PROCESS FACTORS		
Positive Impacts	**Challenges and Barriers**	**Suggested Resolution of Challenges**
• Construction cost savings for some projects. • Many projects have utilized incentive programs to cover a portion of incremental costs.	• Most projects experience incremental cost, averaging 2% or less.[3] Some projects not able to meet incremental cost with existing budget. • Not all projects have utilized avail incentives.	• Hire LEED-experienced design teams to contain costs. • Require maximum utilization of all city incentives for City CIP
• New approaches to energy conservation are being tested.	• LEED energy modeling requirement only budgeted for large projects	• Reassess budgeting of energy modeling for smaller projects
• General Contractor/Construction Manager (GCCM) contracting model seems to work well, due to early involvement and management	• Low-bid process may prevent procurement of services for non-standard practices and new materials.	• Utilize General Contractor Construction Manager process where possible.
• Staff champions have been designated at most departments where appropriate, increasing internal capacity/expertise.	• Some departments lack dedicated staff resources for green building expertise.	• Designate Green Building Team representatives from all appropriate departments.
• Some projects such as Carkeek Park Environmental Learning Center and Park 90/5 Bldg C have exceeded the standard of Silver by getting a LEED Gold Rating.	• Some projects have been unable to meet LEED Silver standard after going through the documentation process. Reasons vary from failure to document credits correctly to differing interpretation of credits to budget challenges.	• Share lessons learned with other LEED projects, establish ad hoc green building assistance team for each CIP project to share knowledge. Have GBT review all LEED submittal packages prior to submission.

[3] *As a % of the Maximum Allowable Construction Cost, which includes all hard and soft (design-related) costs.*

APPENDIX 3

LEED™ and Built Green™ Multifamily Incentive Program Activity

	Projects	LEED or Built Green	Incentive funded projects: square footage	Const. Cost	dwelling units	Projects approved for Incentive funding: square footage	Const. Cost	dwelling units	expected outcome	current status
1	Traugott Terrace	LNC	32,206	$ 3,750,000	50				Certified	LEED NC Certified
2	Nordheim Court	LNC	176,170	$ 23,700,000	146				Certified	documentation in
3	High Point CC	LNC	9,390	$ 3,700,000					Certified	LEED NC Certified
4	Alcyone	LNC	200,000	$ 14,000,000	162					documentation in
5	Croft Place	BG	28,980	$ 6,250,000	21				4 star	under construction
6	Charter Const.	LNC	11,600	$ 784,172					Silver	documentation in
7	307 Westlake	L CS	174,000	$ 33,700,000						LEED CS Silver
8	Merrill Hall	LNC	17,032	$ 5,400,000					Silver	LEED NC Silver
9	9th & Stewart	L CS	237,447	$ 31,000,000					Silver	LEED NC Silver
10	ML King Housing	BG	30,000	$ 4,000,000	26					4 star
11	EcoCascade	LNC	3,900	$ 500,000					Platinum	in design
12	Alley24	LNC	450,000	$ 39,500,000	165				Silver/Gold	under construction
13	FSLC @ Zoo	LNC	8,300	$ 22,500,000					Silver	under construction
14	High Point Affordable	BG	385,000	$ 50,000,000	344				4 star	under construction
15	Denny Park Apts	BG	55,135	$ 5,600,000	50				4 star	under construction
16	Pantages	BG	48,000	$ 5,500,000	49				4 star	under construction
17	Cobb Building	LNC	115,000	$ 1,800,000	162				Silver	under construction
18	Smith Mixed Use	LNC	22,683	$ 2,500,000	15				Silver	in design
19	Pryde Johnson Ballard	LNC	181,519	$ 11,000,000	174				Silver	in design
20	Aleutian Spray Fisheries	LNC				48,000	$ 5,000,000		Gold	in design
21	Terry Office Building	LCS	43,000	$ 6,500,000					Gold	in design
22	West Seattle Community Resource Ctr	LNC	60,000	$ 10,100,000					Certified	in design
23										
24										

Total Projects funded w/Incentive	**2,289,362**	**$ 281,784,172**	**1,364**	
Total Projects approved for Incentive funding				**48,000**	**$ 5,000,000**	**-**

	square footage	Const. Cost	units
Total funded and approved for funding	**2,337,362**	**$ 286,784,172**	**1,364**

LEED units	1,742,247	$ 210,434,172	874
BG units	547,115	$ 71,350,000	490
	2,289,362	$ 281,784,172	1364

APPENDIX 4

City Outreach/Incentive Programs that Contribute to Sustainable Building

Department and Program Area	Description of program
Seattle City Light *Energy Conservation Measures Beyond Code**	Funding, calculated based on energy savings. For Seattle LEED projects to date: ~ $2 million
Seattle City Light *Energy Analysis Assistance**	Funding for energy modeling and/or develop cost-effective conservation strategies for new construction or major renovations. Funding for Seattle LEED projects: roughly $100,000
Seattle City Light *Building Commissioning Assistance**	Funding for building commissioning w/energy impact, major construction/ remodel projects >$5 million. Seattle LEED projects to date: $95,000
Seattle City Light *Natural Ventilation**	Pilot program incentives for natural ventilation studies (strategy often used due to energy savings)
Seattle City Light + partners, Lighting Design Lab *High Quality and Energy-Efficient Lighting*	Technical assistance, training, tours. Projects assisted include: Benaroya Hall, Central Library, Justice Center, and City Hall, NOAA
Seattle City Light Green Power Program	Model photovoltaic projects w/ educational components. LEED/other projects funded: Carkeek Park ELC, Bradner Gardens Park Community Bldg, McCaw Hall, Seattle Federal Courthouse, UW/CUH Merrill Hall, Ballard Library
Seattle Public Utilities *Water Conservation, Water Smart Technology Program, Rainwater collection pilot program*	Incentives, technical assistance. LEED projects assisted include Seattle Municipal Tower, City Hall, Park 90/5.
Seattle Public Utilities *Natural Drainage Program*	Technical assistance and special grants. Provided over $2 million to Seattle Housing Authority for natural drainage at Highpoint Housing redevelopment.
Seattle Public Utilities *Waste Reduction and Recycling Programs*	Technical assistance, training. Encourages recycling of construction waste, building reuse, low toxic design, deconstruction. Over 56,000 tons of construction waste was recycled at City LEED projects.
Department of Planning and Development	Technical assistance with code issues, resource library, incentive development. Developed Urban Sustainability Forum.
Office of Housing	Technical assistance w/ implementation of SeaGreen program for affordable housing
Office of Sustainability and Environment	Policy development and liason with departments and Mayor's office

* *Combined energy conservation measures expected to contribute an estimated 12 million kWh in annual savings.*

APPENDIX 5

Cost Benefit of Sustainable Building

SBW Study

The City contracted with SBW Consulting Inc. in 2003 to evaluate the impacts of the Sustainable Building program, for two projects: Seattle Justice Center and Marion Oliver McCaw Performance Hall. The objectives of the study were to: 1) estimate the life-cycle benefits and costs of achieving LEED credits for the Justice Center and McCaw Hall and 2) provide early feedback for the City's Sustainable Building Program and other developers, building owners, and architects.

McCaw Hall and Justice Center: Evaluation of Cost and Benefits

	McCaw Hall	Justice Center	Combined
Total Cost of Project (millions)	$0.91	$1.72	$2.64
% of Total Cost to Obtain LEED Silver	0.7%	1.9%	1.2%
Benefits of Obtaining LEED Silver (millions)	$0.58- $0.84	$2.56 - $3.71	$3.14 - $4.5
Benefit Cost Ratio			
- Primary costs/benefits (i)	0.79-1.14	0.77-1.10	0.78-1.11
- Primary with secondary costs/benefits (ii)	0.74-1.07	1.93-2.80	1.49-2.16
- Primary/secondary costs/benefits with utility incentives (iii)	0.64-0.92	1.48-2.15	1.19-1.72

Impacts calculated over a 25-year period with both a 2% and 6% discount rate
i. Primary = direct, observable impacts (costs of bike racks, lower electrical bills
ii. Secondary = indirect costs and benefits (e.g., productivity benefits)
iii. Includes the portion of conservation measures paid for through utility incentives.

The results from this study indicate that the City's investment of an additional $2.64 million to obtain LEED credits for the Justice Center and McCaw Hall[4] projects is cost-effective when examined over a 25-year period. The study also found that the occupancy of the buildings significantly affects the cost-effectiveness of LEED actions. The McCaw Hall project was only marginally cost-effective while the Justice Center was cost-effective. This variation comes primarily from the fact that the Justice Center has a very high occupancy, with an estimated 800 full-time employees, compared to McCaw Hall, which is projected to have six full-time occupants. Almost 60% of the benefits for the Justice Center come from indoor environmental quality related to increased productivity gains. Finally, while these estimates provide good evidence of the cost-effectiveness of the additional investment to obtain LEED credits, there is a need to evaluate the actual performance of the building to determine the cost-effectiveness.

A full copy of the report can be downloaded at www.seattle.gov/sustainablebuilding/Leeds.

[4] *While McCaw Hall did not ultimately achieve LEED certification, it was designed to meet LEED standards and did accomplish many sustainable building objectives.*

APPENDIX 6

LEED™ Post-Occupancy Evaluation

The following indicators are being used to collect data on the operations of the Seattle City Hall and Justice Center. Other buildings may be added for evaluation if resources become available. The data collection period is 2004 through 2005. In 2006, the evaluation is planned for completion. The purpose of the evaluation is to better understand the savings and other impacts from the City's investment in green building, and to share lessons learned. Paladino and Company is under contract to collect data and develop the data analysis and report. A cross-departmental team of staff from FFD, HR, SCL, SPU and OSE oversaw development of the plan. Other partners in the evaluation include Judith Heerwagen and Associates, Inc., Better Bricks program of the NW Energy Efficiency Alliance, and the Berkley Center for the Built Environment.

City of Seattle LEED Post-Occupancy Evaluation Indicators	
Environmental	1. Stormwater Quality 2. Stormwater Volume and Peak Flow 3. Potable Water Use 4. Energy Use 5. Emissions associated with Energy Use 6. Construction Demolition and Landclearing Waste 7. Recycled Content Materials Used 8. Indoor Air Quality
Social	9. Comfort Complaints 10. Absenteeism rates 11. Employee turnover rates 12. Access to daylight 13. Visual Comfort Conditions 14. Thermal Comfort Conditions 15. Perceived Worker Effectiveness 16. Workplace Satisfaction
Economic	17. Water Cost 18. Energy Cost 19. Staff-related Overhead Costs, related to Indoor Environmental Quality 20. Net Present Value of First Cost Increment and Savings

APPENDIX 7

Awards, Publications and Conference Presentations

Selected Awards

- National Top 10 Green Projects by American Institute of Architects awarded to Fisher Pavilion
- National Association of Local Housing Finance Agencies Meritorious Achievement/HOME Award for Traugott Terrace, 2003
- Top 25 Leaders in Green Building, Sustainable Industries Journal, 2004
- City of Seattle, Seattle Works Award for Environmental Stewardship, 2004
- Sustainable Seattle Award for Community Outstanding Leadership, 2004
- BEST (Businesses for an Environmental Sustainable Tomorrow) Award from Seattle Chamber of Commerce and Resource Venture for Seattle Justice Center and Fisher Pavilion, 2004
- Enterprise Foundation's Green Communities Initiative recipient for Denny Park Apartments

Selected Publications &

- *Architectural Record*, 2001
- *Landscaping Architecture*, 2002
- *Building Operating Management*, 2002
- *Governing*, 2002
- *Interiors and Sources*, 2002
- *Northwest Home and Garden*, 2003
- *Seattle Daily Journal of Commerce, Seattle Times, Seattle Post-Intelligencer (*numerous articles)
- *Natural Home,* 2004
- *Puget Sound Business Journal*, 2004
- *Housing Washington*, 2004
- *New York Time*s, 2004
- *Interior Design Magazine, 2005*

Conference Presentations

- Sustainable Building 2000 conference, Netherlands, 2000
- World Wildlife Fund conference, Tokyo, 2001
- US Embassy: US-Asia Environmental Partnership Office of Technology Cooperation, Singapore, 2001
- Greenbuild Conference Presentations, 2002-2005
- 2003 Powerful Business Conference location?
- Regional APA Conference Presentation
- Sustainable Building Action Plan for City of Seattle, 1998
- NW Regional Sustainable Building Action Plan, 1999-2000
- From Planning to Action, 1999-2000
- Sustainable Demand Project
- 5th Annual Sustainable Building Symposium, Calgary and Edmonton, Canada, 2002
- UW Continuing Professional Education Program, "Green Building Values & Vision: Driving down the cost of LEED," 2003
- Harvard University Graduate School of Design: Building Green—Smart Places for the Public Realm, 2000
- Environ Design, 2002
- Green Buildings, Sustainable Communities, Vancouver, Canada, 2001
- Federal Government Summit: Washington, D.C., 2001
- International Facility Management Association, Seattle Chapter, 2003
- ReThink Lecture Series, Portland, Oregon, 2003

APPENDIX 8

Commercial Communications Campaign

Excerpted from "Green Building Communications Plan." To download the plan, ads, case studies and other resources, visit www.buildgreennw.com.

In the fall of 2002, the City of Seattle, King County and the U.S. Green Building Council (USBGC) embarked on a program to create and implement a customizable communications plan that can be utilized by USGBC chapters and local organizations to promote green building and LEED™ certification. In order to effectively transform the market, it was important that the communications plan target those specific audiences that were positioned to implement change. The City of Seattle conducted a series of interviews with local developers in an effort to learn how the City could support developers as early adopters of green building and LEED. Developers indicated that they wanted support in helping them create a market preference for green buildings. Other industry stakeholders and governmental agencies have joined together to develop an integrated marketing plan aimed at driving market preference for green buildings.

The stated goal of the communication program is to create more demand for green buildings by helping owners and occupants make the connection between green buildings and their own values. The communications plan is designed to provide the vehicle to make that connection while providing proof of the value of green building.

In June 2003, Pacific Rim Resources (PRR) conducted a series of interviews with executives from the financial and commercial real estate sectors in an effort to identify key barriers and motivations related to green building. The results of this research, along with research conducted by the Environmental Protection Agency's Energy Star Program, and a review of existing research sources provided the foundation for the communication plan. The research helped to identify those groups most likely to influence green building behaviors as well as to provide insight into the barriers to adopting green building principles. A summary of these findings revealed:

- *Most executives were not well informed about green building, though they were generally interested in the concept. They believe that green buildings cost more, that it makes sense primarily in public projects, and that green building probably does not add value to a property.*

- *Real estate and financial executives believe that they are not the direct decision-makers about green building, but that owners, developers, and architects can make green building happen.*

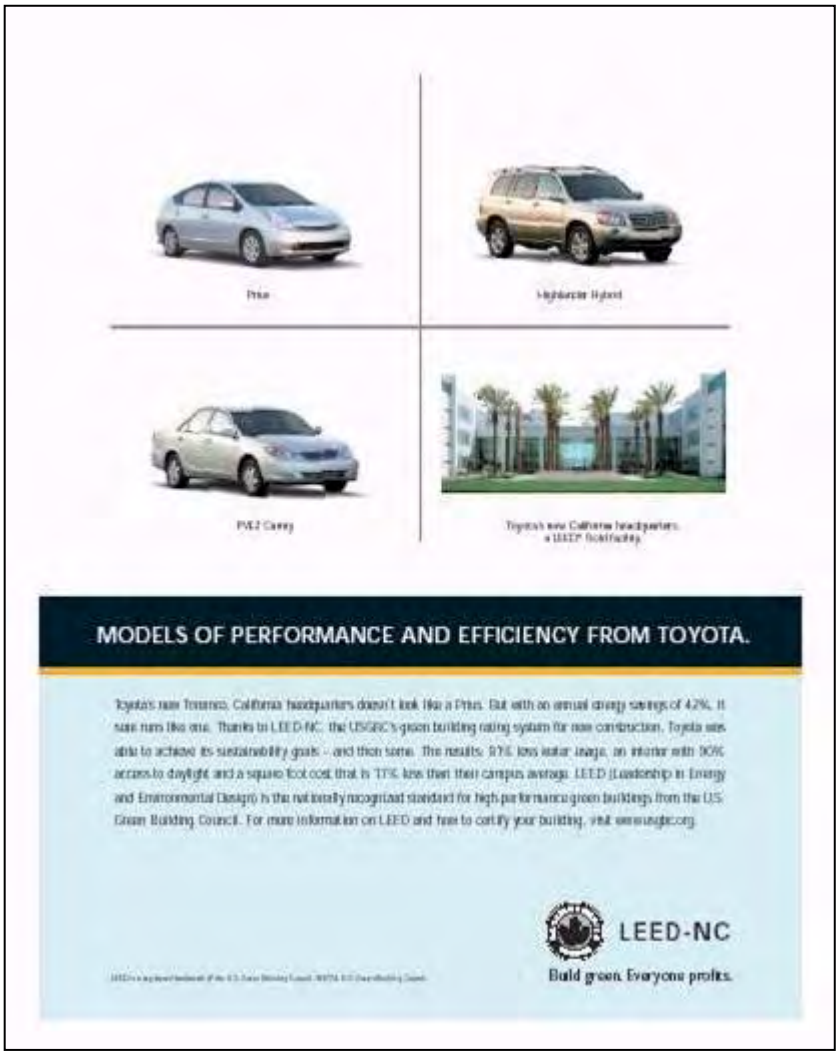
- *Executives say they need proof of the benefits of green building. In order to make green building happen, executives say they need to see how green building adds value to a project, through increased net operating income (NOI), ability to charge higher rents to tenants, lower operating costs, higher resale, ability to lease the property more quickly, or ability to secure higher quality tenants. Executives say they would like to see case studies, documented results from private sector buildings and information about the durability of green products.*

Goals & Objectives

The goals for the green building campaign are the cornerstones for the strategies and tactics that will be deployed in the program. Those activities are designed to support the following goals:

- **Build data/case for green building**
- **Raise awareness among commercial tenants of green building**
- **Extend the green building brand already developed by the USGBC**


WHERE PATAGONIA EMPLOYEES GO TO GET FRESH AIR AND DAYLIGHT.


MODELS OF PERFORMANCE AND EFFICIENCY FROM TOYOTA.
LEED-NC
Build green. Everyone profits.

APPENDIX 9

Built Green™ Communications Campaign

APPENDIX 10

Key Partnerships with the City

This list is not intended to be exhaustive, but rather to give a flavor of the breadth and depth of the partnerships that have occurred or are in progress.

PRIVATE SECTOR/BUSINESS

- **Urban Visions (formerly Gregory Broderick Smith Real Estate)**, Urban Green and Reedo Eco Center
- **Vulcan Northwest**, Urban Green, green building communications campaign
- **Touchstone Corporation,** green building communications campaign
- **Greater Seattle Chamber of Commerce**, Resource Venture, technical assistance, education, BEST
- **Seattle Times**, Built Green Design Competition, earned media
- **Seattle PI,** *At Home* section featuring weekly tips, provided by the City, on green building
- **FannieMae,** Built Green Design Competition
- **Catapult Urban Developers,** Urban Green
- **Turner Construction,** Urban Green
- **Parsons Public Relations,** Urban Green
- **Mithun Architects,** Urban Green

ACADEMIC/LEARNING INSTITUTIONS

- **University of Washington,** education, conservation, facilities, Sustainable Development Ctr.
- **Seattle Public Schools**, conservation, facilities
- **Seattle Central Community College**, education, Sustainable Building Advisory Program
- **Washington State University**, Built Green Design Competition
- **Berkley Center for the Built Environment**, post occupancy evaluation of Justice Center

NONPROFIT ORGANIZATIONS

- **Northwest Energy Efficiency Alliance,** publishing a regional handbook on natural ventilatio
- **BetterBricks**, education, technical assistance, Build Green Communications Campaign
- **Northwest Ecobuilding Guild**, education, tours, green roof initiative
- **American Lung Association**, Built Green Design Competition
- **Urban Environmental Institute,** Sustainable Development Center

PROFESSIONAL ORGANIZATIONS

- **American Institute of Architects** (AIA) local Committee on the Environment (COTE), education
- **International Interior Design Association** (IIDA) local chapter, education
- **U.S. Green Building Council** (USGBC), national and local chapters - program development, education, sustainable schools, Green Building Communications Campaign, Sustainable Development Center
- **Cascadia Region Green Building Council**
- **Urban Land Institute** Seattle Chapter, Sustainable Development Center
- **Master Builders Association** of King and Snohomish Counties, Built Green™ program, education, marketing, program development
- **Greater Seattle Chamber of Commerce, Resource Venture**

GOVERNMENT

- **King County**, marketing, education, Sustainable Development Ctr., Built Green program, Program/Policy Development, Waste Reduction/Recycling, Build Green and Green Building Communications Campaign
- **U.S. Dept of Energy** and **U.S. EPA**, education, green biotech development, Labs 21 Program, Built Green Design Competition, loaned staff
- **State of Washington**, capital projects, technical assistance, policy development
- **City of Portland** and **City of Vancouver**, education, program development
- **Washington State Department of Health**, Built Green Design Competition

APPENDIX 11

Sustainable Connections Lecture Series

The Sustainable Connections Lecture Series included two separate forums in 2005, cosponsored by Seattle Public Library, the Office of Sustainability and Environment, the Department of Planning and Development, Seattle Public Utilities, BetterBricks, and ULI Seattle.

Urban Sustainability Forum: The Big Picture (Host – DPD)

1	Mon, Feb 28, 5:30-7pm	The Business Case for Sustainable Development
2	Fri, March 18, 7-9pm	Take Charge with Sustainable Energy
3	Mon, April 4, 5:30-7pm	Local Politics of Sustainability
4	Tues, April 26, 5:30-7pm	Designing and Building Healthy Places
5	Mon, May 2, 6:30-8:30pm	Inspiring Urban Revitalization
6	Mon, May 9, 5:30-7pm	Civic Innovation & Sustainable Communities
7	Mon, June 6, 5:30-7pm	Public Spaces, Public Life
8	Thurs, June 15, 11:30am-1pm	Integrating Green Roof & Rainwater Harvesting Strategies
9	Mon, June 20, 5:30-7pm	Seattle's Ecological Footprint Present & Future
10	Mon, July 11, 5:30-7pm	Green Development=Economic Development
11	Mon, Aug 8, 5:30-7pm	LEED™ for Neighborhood Development
12	Fri, Oct 28, 7:30-9am	ULI Seattle Presents BetterBricks Awards Breakfast
13	Thurs, Nov 17, 5:30-7pm	Designing Compelling Public Places
14	Mon, Dec 5, 5:30-7pm	Creating Livable Cities with Urban Green Space

Residential Sustainability Forum: Green Home & Landscape Remodeling (Host- SPU)

1	Tues, March 22, 6-7:30pm	Model Remodels: Green Case Studies
2	Tues, March 29, 6-7:30pm	Attainable Sustainable: Cost Effective Green Design
3	Tues, April 12, 6-7:30pm	Creating a Dry Garden: Plants that Thrive on Benign Neglect
4	Wed, April 20, 6-7:30pm	Beautiful Salvage
5	Mon, May 2, 6-7:30pm	Green and Healthy for Kids
6	Tues, May 10, 6-7:30pm	Supergreen: Pushing the Envelope on Green Home Design

Why "Sustainable Connections"?

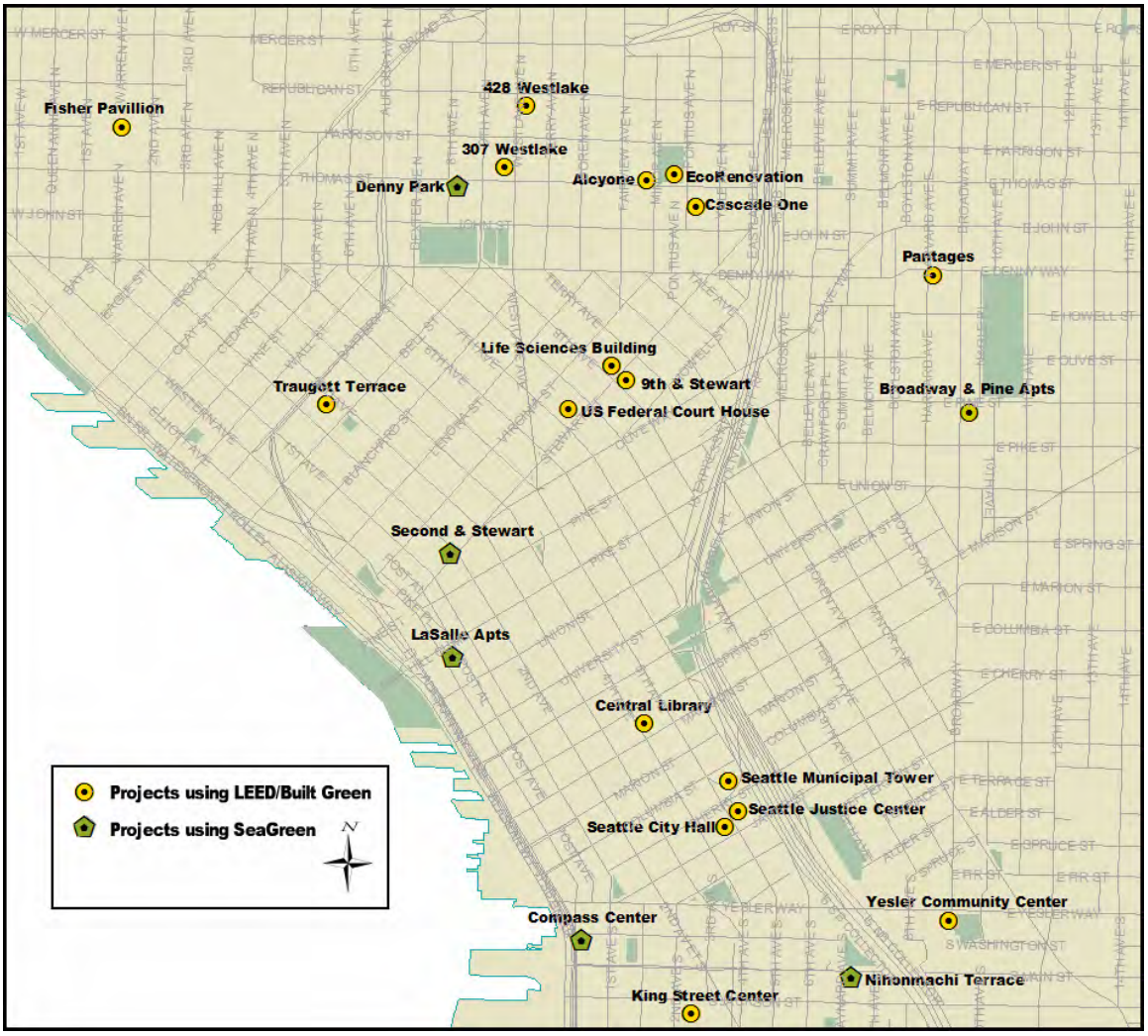
Sustainability is a concept that by its very nature is based on connections. Looking at the world through a sustainable lens means that things are never as simple as they might seem. Many unseen connections and consequences result from what, on the surface, may seem quite ordinary.

Take the example of a cup of coffee. If we look beyond the cup of coffee in front of us, we might begin to question where the water came from to make the coffee, what energy source was used to heat the water, where and how the coffee was grown, and even how the cup will be disposed of or reused. These threads of connection are core to the concept of sustainability, and these connections extend not only beyond the immediate scale we normally experience, but also beyond the present moment. Sustainability is a philosophy that looks into the past and how our current actions were preceded by other, often unseen, actions. Sustainability also looks into the future to understand how our actions may impact future generations.

APPENDIX 12

Center City Map of Sustainable Building Projects

(using LEED™, Built Green™ Multifamily, and SeaGreen)



Thanks to Gretchen Williams at the Seattle Office of Housing for assistance with map.

APPENDIX 13

Examples of Innovative Sustainable Building Incentives from Other Jurisdictions

These examples are here to provide inspiration for future direction and next steps for the City of Seattle program. Many other examples exist, but these are some of the ones I have found to be most inspiring.

1. Sweden and Germany, Green Space Factor

Malmo, Sweden specifies a number of sustainable site strategies known as Green Space Factors that form an a la carte menu from which developers can choose. Each is given a performance weighting factor related to quantitative standards for how each strategy will perform related to ecological function. The menu of strategies includes:

Surface Type	Weighting Factor
• Permeable surfaces	0.0 – 0.5
• Planted surfaces and trees	0.5 - 0.1
• Rainwater infiltration	0.2
• Planted walls (creepers and climbing plants)	0.5
• Green Roofs	0.7

By combining these and other strategies, a developer can compile points to meet the development goal. The composite number comprises whats called an ecologically effective area. Benefits include management of stormwater, decrease of peak flows, air quality improvement, and decrease of urban heat islands. This program was based on a program based in Berlin, known as the Biotope Area Factor (BAF). All potential areas, including courtyards, roofs, and walls are included. These flexible guidelines provide developers with guidance on how to provide for open space or provide other functions of urban ecosystems.

For more information, see www.i-sustain.com or www.stadtentwicklung.berlin.de/umwelt/landschaftsplanung/bff/indes_en.shtml

2. Santa Monica peer-reviewed permitting

The County of Santa Barbara's Innovative Building Review Program offers free advice to developers interested in designing their residential and commercial projects to use energy more efficiently. The county convenes regular meetings of technical experts and interested developers to review cost-effective methods of saving energy for each program participant. The program provides a range of incentives to developers who exceed the minimum standards of California's energy code (Title 24) by between 20 and 40% and score between 4 and 30 "energy points." Energy points come from a prescribed Energy-Efficient Target Menu, which includes items generally outside the purview of California's energy code. Incentives include expedited plan review (except for complicated projects), 50% reduction in the energy plan check fee, free consultation and design assistance, possible special recognition from the County, use of Innovative Building Review Program logo for marketing.

3. Arlington Virginia Innovative Green Building Program with Impact Fees for non-LEED development

Green Building Requirements for Site Plans (Private Development)
In December 2003, Arlington County enhanced its program to encourage site plan projects to incorporate green building components and processes. The goal of this program is to reduce the environmental impacts of development. The program includes the following requirements:

1. **LEED™ Accredited Professional.**
2. **LEED™ Scorecard.**
3. **LEED™ Tracking.**
4. **Construction Waste Management.**
5. **Energy Star Appliances.** thermostats (in residential units); residential light fixtures; windows and doors; and HVAC systems.

Green Building Fund
In December 2003, the County established a Green Building Fund and a policy of having site plan developers who do not commit to achieving a LEED™ rating from the U.S. Green Building Council (USGBC) contribute to the Fund. The contribution is calculated at a rate of $0.03 per square foot. (This contribution calculation is based on the fees assessed by the USGBC for registration and evaluation of a formal LEED™ application.) The Green Building Fund is used to provide education and outreach to developers and the community on green building issues. If a project achieves 26 or more points and the developer receives LEED™ certification from the USGBC, the Fund contribution is refunded upon receipt of the final LEED™ certification.

Green Building Incentive Program
Originally adopted in October 1999, the green building density incentive program was revised and enhanced in December 2003. The program allows a private developer to apply for additional density if the project achieves a LEED™ award from the USGBC. The program applies to all types of building projects (office, high rise residential, etc.) achieving any one of the four LEED™ awards. The density bonus ranges from a minimum of .15 FAR for a LEED™ Certified project to a maximum of .35 FAR for a platinum project.

Find out more by contacting the Arlington County Environmental Planning Office (703-228-4488) or the Arlington County Planning Division (703-228-3525). Or visit them online at http://www.arlingtonva.us/Departments/EnvironmentalServices/epo/EnvironmentalServicesEpoGreenBuildings.aspx

APPENDIX 14

Parks and Recreation Department Sustainable Development Scorecard

This Sustainable Development Scorecard was developed by Richard Gelb of the Seattle Parks and Recreation Department in order to address sustainability items of importance to the department that are not addressed by LEED™, and to cover many capital projects that are under 5,000 square feet or do not include buildings. These projects do not fall under the City Sustainable Building Policy.

Seattle Parks and Recreation Sustainable Development Scorecard version 5-16-05

0= N/A or not achieved at all, 1=25% achieved, 2=50% achieved, 3=75% achieved 4=100% achieved, 5= beyond target

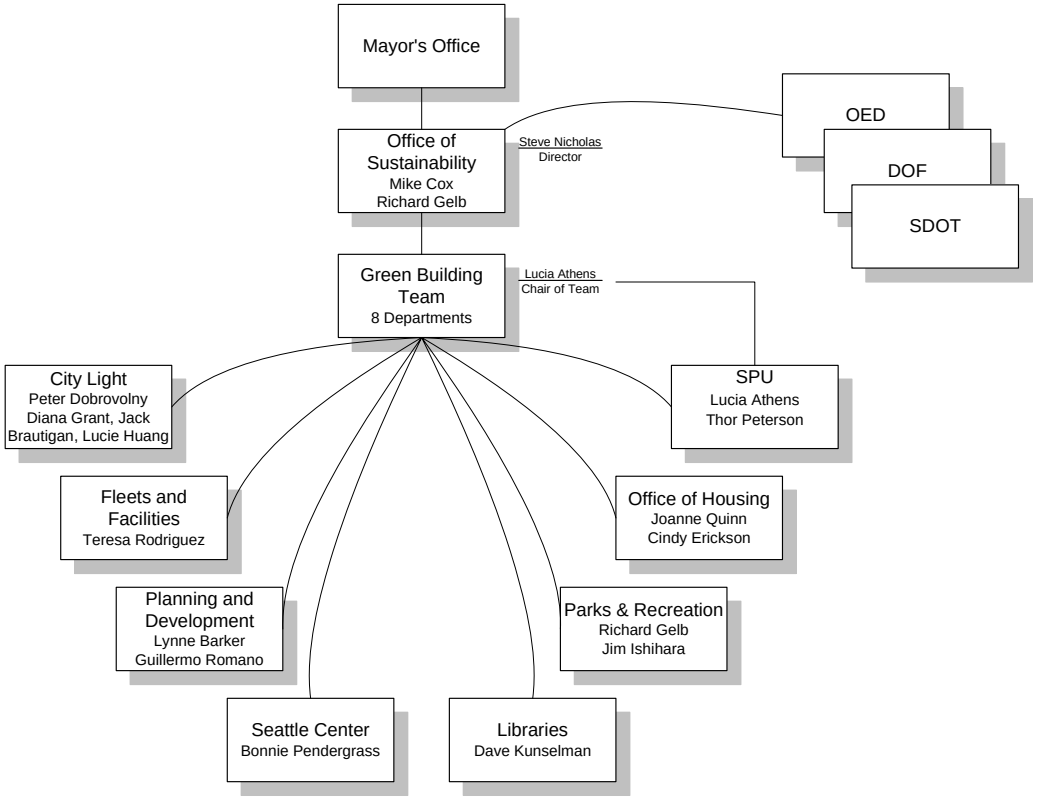
		Top ten goals:	Objective(s):	Degree achieved:
Fiscal	1	Operations and maintenance cost reduction	**Objectives:** 1. 100% achievement of 'smart roof design' – translucent elements, no reverse pitch, significant overhangs and pitch of 4:12 for sloped roofs, 2":4' when low-sloped roofs are unavoidable 2. 95% achievement of reduced vandalism vulnerability – minimal uniform surface tagging targets over 2 square feet, anti-graffiti film on high-target sites 3. 'Easy Mow Turf Design' – No steep grades or need for hand-mower	Smart Roof: Reduce Vandalism Vulnerability: Easy Mow Turf:
Social	2	Revenue generating capacity	**Objective:** Enhance the ability to generate revenue via ongoing tenants, intermittent rentals, on-site vendors or other community partnerships	
	3	Engage potential new users in design	**Objective:** Diversify program scope and intensify facility usage patterns by engaging at least one proximal, historically-underserved community or stakeholder group to provide guidance on facility features and design	
	4	Improve aesthetics and enhance neighborhood character	**Objectives:** Include public art, respond to neighborhood context and promote social capital development by integrating public art, increasing extent and improve functions of gathering spaces and using context-sensitive design elements that compliment and accentuate neighborhood history and character	
	5	Improve health, safety and comfort of park users and building occupants	**Objective:** ▪ Follow Crime Deterrence Design Standard ▪ Improve indoor air quality via operable windows, natural ventilation strategy and/or exceeding ASHRAE Standard 62-1999 for ventilation ▪ Achieve daylight factor of 2 in 75% of regularly occupied spaces and site lines to exterior glazing for 90% of regularly occupied spaces	Crime deterrence: Indoor Air: Daylight:
	6	Improve multimodal access	**Objective:** Minimize vehicle trips generated while increasing pedestrian, bicycle and transit modes of access	
Environmental	7	Improve habitat and ecological function	**Objective:** Increase the extent, health and diversity of native vegetation and ecosystem types	Restored shoreline (ft): Natural areas created / preserved (acres):
	8	Improve quality and quantity of storm water	**Objective:** Develop a storm water flow regime that more closely mimics pre-development conditions by: • Reducing impervious surfaces (from existing levels) • Increased storm water infiltration/groundwater recharge capacity	Acres of impervious removed: Infiltration capacity:
	9	Minimize waste, emissions and resource extraction	**Objectives** • Adaptive re-use of >30% of existing facility elements • >70% of construction debris diverted from landfill 3) Use HDPE instead of PVC for drain lines	Re-use %: Diversion from Landfill rate: Non-PVC:
	10	Improve efficiency of energy and water use	**Objectives:** Minimize long-term energy and water use through design approaches, design elements and fixture/system selection • Install Maxi-Com compatible irrigation system, high efficiency spray heads and drip system where appropriate • Displace potable water use by capture and employment of rainwater • Use high-efficiency (>85%) furnace • Exceed Seattle Energy Code by 15%	Maxi-com: Rainwater harvest capacity (in gallons): 85+ Furnace: Exceed Energy Code:

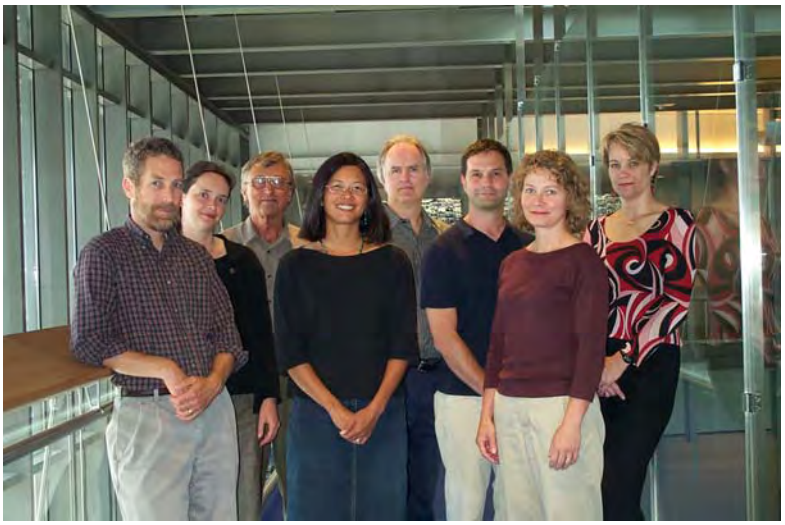
Printed on recycled paper City of Seattl

APPENDIX 15

Green Building Team Structure and Explanation of Acronyms

The diagram below outlines the current structure of the City of Seattle Green Building Team and the Sustainable Building Program. A new structure consolidating the majority of green building functions within the Department of Planning and Development is currently under consideration and development.





Members of the Green Building Team (L to R): *Michael Cox, Amanda Sturgeon (now with Perkins and Will), Peter Dobrovolny, Lucie Huang, Jack Brautigan, Thor Peterson, Joanne Quinn, Lynne Barker.*

Acronyms

An effort was made to use a minimum of acronyms in this report. A list of common acronyms related to the Sustainable Building Program's work is provided below, just in case:

DPD	Department of Planning and Development
GBT	Green Building Team
HR	Human Resources Department
LEED	Leadership in Energy and Environmental Design (Green Building Rating System)
OED	Office of Economic Development
OSE	Office of Sustainability and Environment
SCL	Seattle City Light
SDOT	Seattle Department of Transportation
SPL	Seattle Public Libraries
SPU	Seattle Public Utilities
USGBC	United States Green Building Council

APPENDIX 16

Urban Green: A Resource Center for Sustainable Development

The concept of creating a one-stop shop for sustainable development has been suggested by members of the building industry and is included in Mayor Greg Nickel's Environmental Action Agenda. As a result of a steering committee led by the City of Seattle and development of a business plan, this dream is nearing realization: a new nonprofit, Urban Green, has been formed.

In partnership with the private sector, Urban Green is leading a collaboration to create a multi-tenant sustainability center in Pioneer Square, with Urban Green's offices and resource library as a key tenant.

Learn more about Urban Green in the attached promotional materials.

(Above)
Jan Gehl event in front of
The Reedo Eco Center.

(Right)
Rendering of The Reedo
Eco Center, Mithun.

"A good city is like a good party. You spend more time than you had planned because it's so wonderful."

— Jan Gehl, internationally renowned Danish urban planner addressing a crowd of 300 supporters of sustainable development eating dinner on Occidental Ave. in front of The Reedo Eco-Center. June 8, 2005.

"It worked because we had a wide coalition of people supporting it. Environmental people, business people, architects, builders and developers interested in green building — they all got together. That's what made it happen."

— Marc Daudon, Vice President, Cascadia Consulting, speaking about the successful passage of Washington's High Performance Building legislation in May 2005.

Momentum is building . . .

Interest and enthusiasm have converged to create a place devoted to and inspired by economic, environmental, and social sustainability. The Reedo Eco-Center is where Seattle's sustainable community works, learns, eats, meets, and shops.

The Reedo Eco-Center is also home to Urban Green, the design and development community's resource center for creating greener projects and places throughout the region.

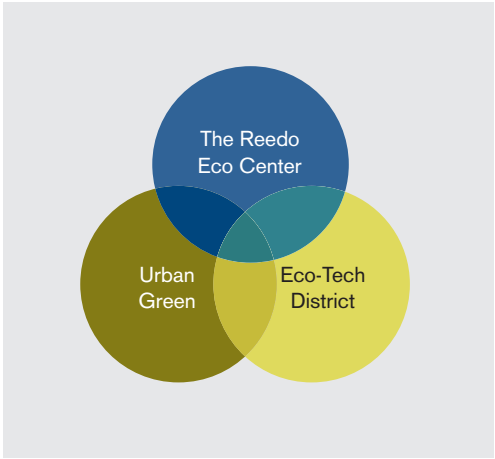
The Reedo Eco-Center and Urban Green will spark your imagination to dream about a better future for our region.

The Reedo Eco-Center and Urban Green: A place to dream out loud.

The Reedo Eco-Center Vision

(Near Right)
The Reedo Eco Center will be the nexus of an eco-tech neighborhood south of downtown.

(Far Right)
Wood timbers within the building were salvaged and re-milled on site.



"Cities are the places that attract talent. Consider that 90% of GDP (Gross Domestic Product) comes out of metropolitan areas. And yet somehow some people think that we don't need cities. Not only do we have to open our borders, we have to strengthen our cities massively because they're the cornerstones of our ability to compete for talent."

—Richard Florida, author,
The Rise of the Creative Class

New Economic Development Opportunities

The Reedo Eco Center will create a new outpost of social and economic vitality on the southern edge of Pioneer Square, and foster continued development between the heart of the neighborhood, at First and Yesler, and the stadiums.

A Gathering Place, A Conference and [illegible] t Facility

The Reedo Eco Center's mix of retail, restaurants, and service organizations all share a common vision: to create a sustainable future in the Northwest by building a strong network of community partnerships. The Reedo Eco-Center will be home to Urban Green, the first place developers and designers will come to learn how to develop green projects, as well as an incubator for small sustainability start-ups.

A Building that Demonstrates Green

The Reedo Eco-Center, targeted for LEED® Gold Certification, is planned to physically represent our interconnected goal of sustainable development by acting as an educational tool and living demonstration of sustainability. Innovative energy, water, materials and other practices will be included.

Historic Preservation and Adaptive Re-Use – Inherently Green

Redevelopment of an existing building is inherently sustainable, and the Reedo Eco Center leverages the material livelihood of a 1904 building. As part of the retrofit, a new concrete and steel structure supports the original structural wood timbers, which have been salvaged and re-milled on site and re-used as floorboards. The original spirit of the historic building is maintained, with an additional floor and roof deck that help to increase density in the downtown core.

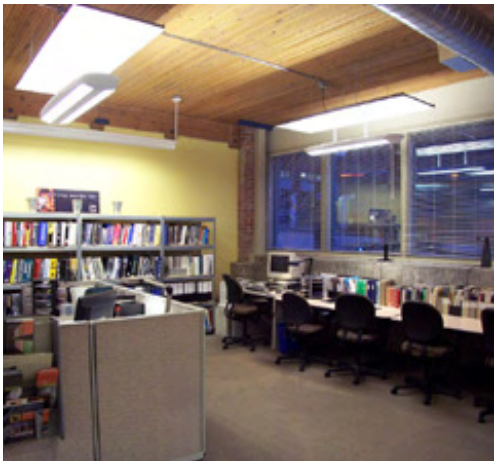
The Nexus of a Budding Eco-Tech District

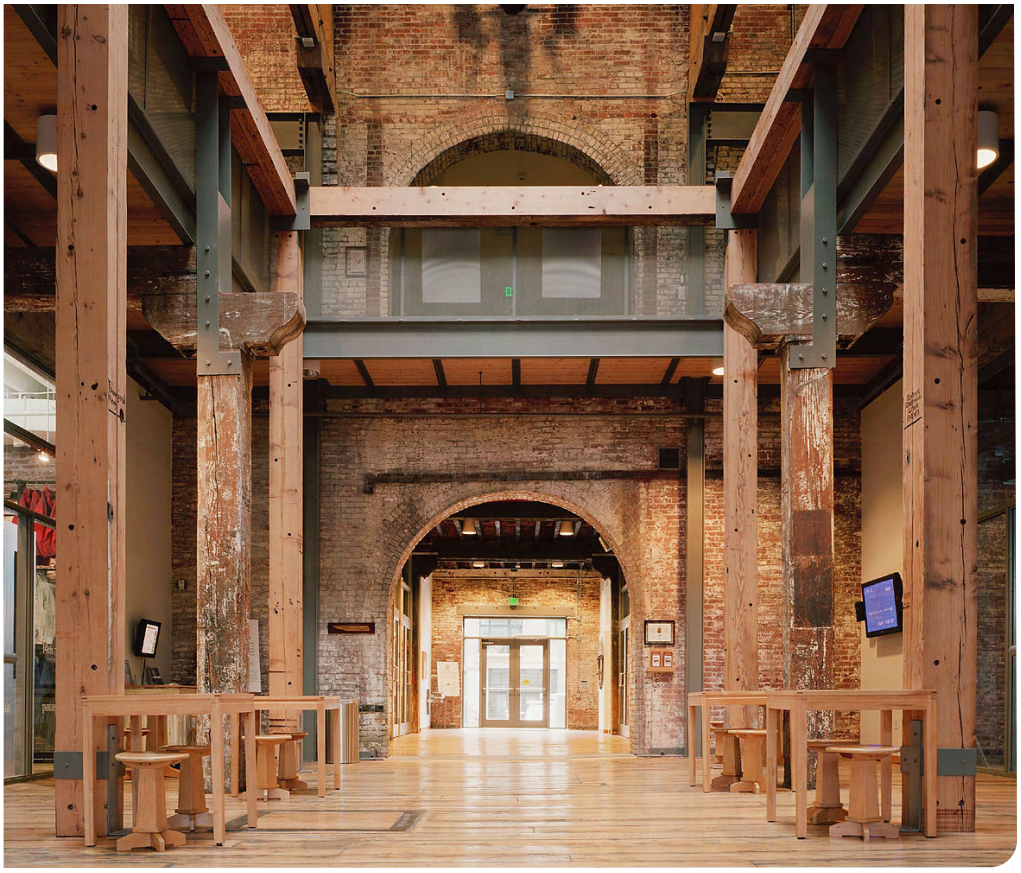
The Reedo Eco Center will seed the creation of an Eco-Tech District south of downtown, attracting sustainably minded businesses and people from the Northwest. The Eco-Tech District will demonstrate that buildings – and neighborhoods – that are sustainably designed are better for all of us: workers, developers, owners, users. The Eco-Tech District will be a neighborhood zone for sustainability, home to any business with an economic, social, or environmentally sustainable agenda. It will also function as a living laboratory to test ecological design concepts in action.

What's Going On in South Downtown Today?

"Livable South Downtown" is a project of the Seattle Department of Planning and Development that will enhance urban core neighborhoods, increase housing options, encourage pedestrian travel and attract businesses that serve area residents, employees and visitors. Sustainability will be a large part of this exciting effort to transform South Downtown into a bold new model of urban living.

Urban Green:
A Resource for Sustainable Development





Models for Urban Green and The Reedo Eco Center

(Above) The Lighting Design Lab Resource Library, funded by public and private partners. Since 1989, the Lighting Design Lab has hosted over 61,000 visitors offering tours, training, and technical assistance. (Right) Ecotrust Building (Natural Capital Center) Portland, Oregon. The historic building renovation achieved LEED Gold, and provides a home for a community of tenants, a conference center, and the Portland Office of Sustainable Development, Ecotrust.

Photos courtesy of Lighting Design Lab & the Natural Capital Center.

"The concepts of sustainable development are not foreign. We are aware that future generations have a right to a world which will also need energy, should be free of pollution, should be rich with biological diversity, and should have a climate which will sustain all forms of life."

— Wangari Maathai, Winner, 2004 Nobel Peace Prize, the first Nobel Peace Prize awarded for environmental work

Urban Green will be the cornerstone tenant within The Reedo Eco-Center in Pioneer Square. It will be the first place developers, owners, architects, designers, contractors, and the general public will go to learn just how easy and profitable it is to develop green projects – and they'll come away with the know-how to do it.

Momentum is building toward increased sustainable development in the Puget Sound region. Great progress has been made, but more help is needed. If the promise of sustainable development is realized, we can expect more vital neighborhoods, increased economic development, enhanced environmental and human health, more fulfilling lifestyles, and a better quality of life for all.

As the benefits of sustainability become more evident, leaders in the building industry are seeking ways to make sustainable development the rule rather than the exception. What we need now are more people in the conversation, more organizations working together, and a "one-stop shop" resource that also serves as a center for this movement in our region.

Urban Green – A Resource for Sustainable Development

Urban Green is a not-for-profit organization dedicated to increasing the visibility and success of sustainable development practices in the Puget Sound Region by:

- Streamlining access to existing information and education programs
- Providing leadership for increased collaboration, synergy, and mutual support among organizations and businesses
- Stimulating green business economic development and fostering market success of emerging sustainable business opportunities
- Incubating new ideas and inspiring newcomers to sustainable development
- Creating a model for other cities to mainstream sustainable development

Urban Green is a public/private partnership between:

- Urban Land Institute Seattle District Council
- Cascadia Region Green Building Council
- City of Seattle
- King County

Urban Green:
A Resource for Sustainable Development

(Above)
Eco-Charrette for Urban Green and Urban Visions (formerly Gregory Broderick Smith Real Estate) helps tenants and owners explore green strategies.

"Clients are always interested but skeptical because of the initial cost factors. But the owner likes the idea of a healthy environment because if you can improve worker productivity through less absenteeism and greater motivation from natural daylight, then it makes a big difference financially. Clients don't have to go 100% green — any increment will help. Every step toward building sustainably is an achievement."

— Bruce Fowle, FAIA, Senior Principal, Fox & Fowle Architects, architect of Four Times Square Condé Nast Building

Urban Green – Provides critical services to further sustainable development

Numerous organizations are already involved in transforming the market toward more sustainable development via education, advocacy, technical assistance, and business services. Nevertheless, there are distinct unmet needs that can be realized by Urban Green's resources and services that will advance the success of sustainable development and related initiatives in the economic, social, and environmental sustainability arenas, including:

The Reedo Eco-Center: This new meeting place will be a magnet for sustainable thinking and action in Seattle – where organizations and businesses focused on environmental and social sustainability will make their home, or come to work, think, and play. Urban Green will guide the vision and lead the creative partnership with the building owner to establish and manage the Reedo Eco-Center.

Integrated Project Support: Programs, businesses, and resources will be assembled that increase the likelihood and success of an integrated design process, and full utilization of existing resources for sustainable development. Examples include co-locating technical assistance staff, providing a host location for eco-charrettes and design teams meetings, encouraging existing service providers to integrate their offerings, and connecting green building projects to financial resources.

Conference Center: Urban Green will manage a 150-seat conference center that will be the meeting location for the sustainability community. The Conference Center will host a wide range of educational and social events, guided by the Urban Green vision.

Resource Library and Living Laboratory: A unique technical library will provide a single comprehensive source of information on sustainable development information such as case studies, new product specifications and guidelines on sustainable development. Urban Green will integrate interpretive materials, displays, and tours for The Reedo Eco-Center, a place to model and test sustainable development practices.

Sustainable Business Incubator Services: Urban Green will foster small and start-up sustainability organizations by providing executive suites that will help seed new ideas, and increase business potential and success through increased networking and business support.

Urban Green – A resource for the Puget Sound region

Urban Green will provide services to a range of people in the public, private, and for-profit communities, including:

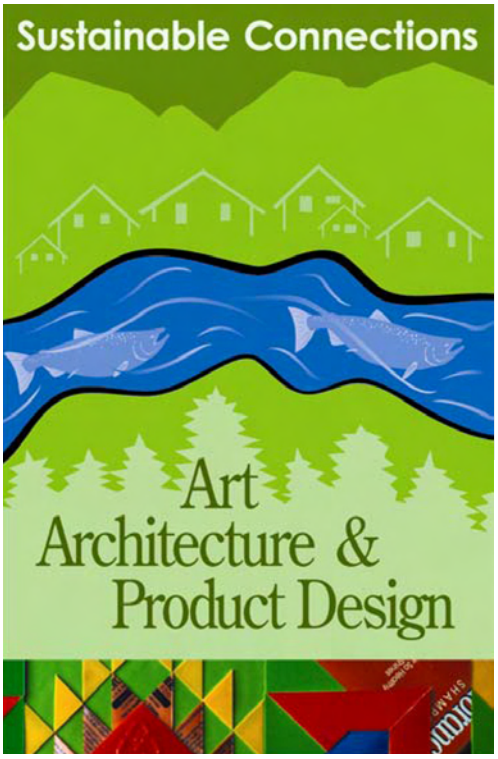
Building Industry. Architects, developers, building managers, and contractors will conduct design charrettes and use the Urban Green resource library to create projects using a more integrated design process. Developers, owners and property managers will be stimulated by new ideas, and find an entry point into the sustainable development community.

Public. Homeowners can access information that will promote greener lifestyle choices and healthy home improvement ideas. Newcomers to the concept of sustainability can learn through retailer education and art installations designed to inspire sustainable thinking and information about the power of consumer choices.

Partner Organizations. A variety of partner organizations that share common values of sustainability in their mission will be able to advance their own sustainability goals by participating in networking events, forums, salons, and new collaborative projects. Community bulletin boards and service or volunteer referrals can enhance the effectiveness of partner efforts, and help to serve the community better. Partners may or may not be tenants of the Reedo Eco-Center.

Accomplishments to Date

10/6/05



(Above)
Image from *Sustainable Connections Exhibit: Art, Architecture & Product Design"* co-sponsored by Urban Green in 2003/2004.

Governance

- Developed Business Plan March 2004
- Decided to form own nonprofit October 2004
- Established Board of Directors, February 2005, elected officers (Bob Burns, Chair, Ed Geiger, Treasurer, Kollin Min, Secretary)
- Approved Articles of Incorporation and Bylaws, March 2005
- Applied for nonprofit status with IRS March 2005 (Anticipate nonprofit status approval by end of 2005)
- Established Tenant Advisory Committee to provide recommendations to GBSRE on building rules and regulation and building standards, Sept. 2005

Staffing

- Secured part-time Executive Director, June 2004 through June 2006
- Have had several volunteers work on tasks such as tenant recruitment, fund raising, resource library, events planning, and furniture research

Partnerships

- Established partnerships with 4 founding partners: Cascadia Region Green Building Council, Urban Land Institute Seattle, City of Seattle, King County
- Entered into partnership with GBSRE (Gregory Broderick Smith Real Estate) to create Eco-Center, June 2005
- Established partnerships with 21 other supporting nonprofit partners and for-profit partners

Funding/Contributions

- Established Fiscal Agent, UEI, 2004
- Seed money: Raised $160,000 for business plan development and implementation, development of marketing materials, tenant recruitment, and fund raising strategy.
- $55K GBSRE, $85K City of Seattle, $10K County, $5K UEI, $5K Vulcan
- Start-up funding: Raised $75,000 for initial staffing and furniture and equipment
- Recent donations include:
  Parsons PR contributing design time for marketing materials, Ed Geiger donating financial accounting software, Mithun contributing 10 hours of design team for Urban Green space planning, Mike Cox donating $1000, Lucia Athens donating salvage furniture from Library, photographer Chris Jordan donating semi-permanent loan of large environmental photos, Gates Foundation donating lighting fixtures.
- Logged thousands of hours of in-kind and volunteer hours (all steering committee, City and County staff, volunteers)

Marketing

- Created interim Prospectus and marketing materials, October 2003
- Branded Urban Green and Reedo Eco-Center, July 2005
- Refined and completed mission and vision, August 2005
- Designed logo, business cards, and letterhead, Sept 2005
- Completed marketing materials, Oct. 2005
- Secured URL

Tenant Recruitment/Space Planning

for Reedo Eco Center and Urban Green

- Developed RFP for potential space in Pioneer Square and South Lake Union and received proposals for 6 locations
- Agreed with GBSRE on space in Pioneer Square, west of QWEST field
- With Catapult, developed letters of intent for 7 Eco Center tenants representing 12,000 sf of space in the building
- With Catapult developed commitments from 8 organizations to house people within Urban Green
- With GBSRE, Catapult, and Mithun, convened 2 design charrettes for Eco-Center, and formed Tenant Advisory Committee.

Programming

- Co-sponsored 03/04 Sustainable Connections Exhibit with City, County and Design Resource Institute, which included design boards regarding concept for Eco-Center
- Announced new nonprofit publicly at exhibit opening reception Nov 17, 2003
- Developed plan for Resource Library with volunteers from RAFN and ReStore
- Hosted Jan Gehl dinner for 200 people in front of building on Occidental St., July 13 2005
- Held networking party for tenants and partners at Reedo Eco-Center, July 8th 2005
- Collaborated with Seattle Art Institute on green interior design course, Aug/Sept 2005
- Secured donation of City of Seattle's Department of Planning and Development green building library to seed public resource library, Sept 2005
- Purchased small amount of salvaged office furnishings (37 chairs) from Seattle Libraries, Sept 2005

(Above)
Wild Thyme Farm which practices sustainable forestry helps to preserve sensitive ecological systems and naural resources in the Northwest. Photo taken at Wild Thyme Farm, Oakville, Washington.

Urban Green – Board and Staff

Chair:
Bob Burns, Deputy Director,
King County Department of Natural Resources

Secretary:
Kollin Min, Vice President for Programming,
Cascadia Region Green Building Council

Treasurer:
Ed Geiger, Director of Finance,
Capitol Hill Housing

Kelly Mann, Executive Director,
Urban Land Institute, Seattle District Council

Guillermo Romano, Director,
City Design, City of Seattle

Lucia Athens, Chair,
City of Seattle Green Building Team

Executive Director:
Mike Cox

Urban Green – Founding Partners

Cascadia Region Green Building Council
Urban Land Institute, Seattle District Council
City of Seattle
King County

Urban Green – Supporting Partners

AIA Committee on the Environment
Bainbridge Graduate Institute
Battelle NW
Catapult Community Developers
Design Resource Institute
Environmental Home Center
Urban Visions (formerly Gregory Broderick Smith Real Estate)
International Sustainable Solutions
Lighting Design Lab
Northwest Energy Eficiency Alliance
Northwest SEED
O'Brien & Company
Pioneer Square Management Association
The RAFN Company
Social Enterprise Group
Sustainable Style Foundation
Turner Construction
University of Washington College of Architecture and Urban Planning
Urban Environmental Institute
Vulcan, Inc.

Urban Green – Get Involved!

Contact to get involved with the project, or for more information:

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Executive Director, Urban Green
206-684-5518
michael.cox@seattle.gov